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Jeff Hodson

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EXAMINER

LU, CHARLES EDWARD

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/624,223	Applicant(s) HODSON ET AL.	
	Examiner CHARLES E. LU	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to the Request for Continued Examination filed 12/10/2009. Claims 1-30 are pending and rejected.

Response to Arguments/Response to Amendments

2. Applicant's arguments regarding the 35 USC 103(a) rejections were fully considered. Applicants argue the claims as amended. The previous grounds of prior art-based rejections are withdrawn. The new grounds of rejection presented below are necessitated by amendment.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 13-17, and 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilbacher et al (U.S. Patent 6,724,887), hereafter "Eilbacher," in view of Armstrong (U.S. Patent 6,356,633), hereinafter "Armstrong," and further in view of Ulrich (U.S. Patent 6,895,438), hereinafter "Ulrich."

As to claim 1, Eilbacher teaches the claimed subject matter including:

Compiling performance reports (col. 10, ll. 50-62) in a contact center (fig. 5, #201) serving a plurality of clients (fig. 3, #100) using a plurality of agents (fig. 3, #104);

Opening a transaction file (col. 10, ll. 28-44) for saving information about exchanges (col. 6, ll. 1-8) between an agent of the plurality of agents and a client of the plurality of clients;

Measuring indicia of activity (e.g., satisfactory or unsatisfactory experience, col. 12, ll. 54-55, or various captured data, col. 10, ll. 27-44, including email communications, fig. 5, #202) for the exchanges between the agent and client.

Adding the measured indicia of activity to the transaction file (col. 12, ll. 54-64, col. 11, ll. 50-54, col. 10, ll. 27-61); and

Compiling a report based upon the transaction file (col. 9, ll. 57-67, col. 12, ll. 54-64).

Eilbacher does not expressly teach:

1) (performing the above) in regard to asynchronous transactions (understood to include emails)

2) an effort value (for the asynchronous transactions) including an effort value which represents effective effort to respond to each transmission within each transaction, wherein effective effort is calculated to reflect time to evaluate and prepare a response and is independent of total duration of actual transaction channel occupancy;

3) determining a total effort value for each transaction based on the effort values;

4) displaying the total effort value for each transaction.

However, as to (1), Eilbacher teaches analyzing communications in a call center environment (e.g., col. 8, ll. 29-65), but further teaches an email transaction (e.g., fig. 5, #202). An email transaction is asynchronous because it is an intermittent transaction in which data is created and then transmitted, consistent with the description in Applicant's specification (p. 10).

Furthermore, Armstrong teaches that emails may be handled as though they were calls handled by a call center (e.g., col. 9, ll. 64-66). The emails are analyzed by the system to generate reports (e.g., col. 10, ll. 1-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, such that emails (i.e., asynchronous transactions) are supported. The motivation would have been to support generating management reports of the email messages and to further track the agent and minimize agent idle time, as taught by Armstrong (e.g., col. 8, l. 60 - col. 10, l. 16).

Eilbacher and Armstrong would further teach or suggest (2) and (3) above. Armstrong as applied above teaches or suggests agent tracking statistics based on emails, including average time between receipt and response (of the email) and average email message handling time (e.g., col. 10, ll. 1-16). Such calculations teach or suggest the claimed subject matter of calculating an effort value to respond to each transmission within each transaction, reflecting time to evaluate and prepare a response, and determining a total effort value, as claimed.

Eilbacher and Armstrong do not expressly teach (4). However, since Armstrong generates management reports, those reports should be displayed in order for a person to view them. Furthermore, Ulrich teaches a display (e.g., fig. 4, #67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher and Armstrong, such that the total effort value is displayed. The motivation would have been to allow a person (such as a manager) to view them, as known to one of ordinary skill in the art.

As to claim 2, Eilbacher as applied above further teaches wherein the step of opening the transaction file further comprises detecting an initial contact between the agent and the client (e.g., caller initiated transaction, col. 9, ll. 10-20), and tagging subsequent transmissions as belonging to the transaction (col. 9, l. 10-50). Note that the tagging has to occur or else the system would not know what communications to group together into a customer experience (col. 9-10).

As to claim 3, Eilbacher, Armstrong, and Ulrich as applied above teach identifying a prior contact of an agent involving the client (Eilbacher, col. 13, ll. 1-40, col. 5, ll. 22-25). Contacts of an agent are stored in a database (Eilbacher, col. 10, ll. 27-44).

Eilbacher, Armstrong, and Ulrich do not expressly teach wherein a prior contact list of the agent is searched to identify prior contacts, or wherein the searching is performed when the initial contact is detected between the agent and client.

However, Eilbacher teaches detecting initial contact (using cradle to grave recording, col. 9, ll. 14-20), and storing the agent's communications in a database (col.

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10, ll. 28-44). The database stores the customer and the agent (col. 10, ll. 36-39), and marks unsatisfactory communications (col. 11, ll. 51-53).

Furthermore, Ulrich discloses a contact list (fig. 3A-3B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that unsatisfactory contacts with customers (Eilbacher, col. 11, ll. 51-53) are stored in the list. The motivation would have been to facilitate knowing if the agent had a previous conversation(s) with the customer (by searching a smaller list, instead of potentially the entire customer database), and to inform the agent when contact is established that he/she is speaking to a customer with a previous unsatisfactory experience, as taught by Eilbacher (col. 5, ll. 22-25). As such, the claim limitations would be met.

As to claim 4, Eilbacher as applied above further teaches wherein the step of measuring the indicia of activity further comprises counting a number of asynchronous exchanges between the agent and the client (e.g., number of conversations or number of transfers, col. 10, ll. 13-17; emails handled the same way as calls, see above).

Eilbacher, Armstrong, and Ulrich do not expressly teach, “to close a sale.”

However, Eilbacher teaches counting the number of exchanges in “cradle-to-grave” transactions (col. 10, ll. 4-17). “Cradle-to-grave” transactions can end when the agent completes a transaction (col. 9, l. 18). Since Eilbacher is drawn to customers of a call center, the transactions may be sale transactions (e.g., col. 1, l. 64, col. 2, l. 54, col. 7, l. 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that the agent's transactions are sales transactions. Therefore, when the agent completes a transaction, the agent closes a sale, which meets the claimed subject matter. The motivation would have been to use Eilbacher in a sales environment, as known to one of ordinary skill in the art.

As to claim 5, Eilbacher as applied above further teaches wherein the exchanges comprise email (see e.g., fig. 5).

As to claim 6, Armstrong as applied above further teaches or suggests an average time between messages of transactions for each agent (col. 10, ll. 4-11).

As to claim 7, Eilbacher, Armstrong, and Ulrich as applied above do not expressly teach how much time has elapsed between successive transmissions of each asynchronous transaction.

However, Eilbacher teaches a "wait time" col. 6, ll. 35-40 and measuring the amount of time a customer is on hold (see description for figs. 2-3). The time on hold can be an elapsed time between successive communications. Eilbacher also teaches recording start/end times for communication, and states that all data associated with customer-agent communication can be recorded (col. 8, ll. 50-65). As applied above, emails are handled in the same way as calls.

Furthermore, Armstrong teaches the time between email receipt and response (e.g., col. 10, ll. 8-12). This further teaches or suggests how much time has elapsed between successive transmissions of each asynchronous transaction.

Since e-mail conversations are treated like phone conversations as discussed above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that elapsed time between successive transmissions of email transactions are determined and recorded. The motivation would have been to facilitate customer experience analysis, taught by Eilbacher (col. 11, col. 6, ll. 35-40), and to further facilitate tracking the agent and minimizing idle time, as taught by Armstrong (e.g., col. 9, l. 60 – col. 10, l. 16).

As to claims 8 and 9, Eilbacher as applied above further teaches segregating exchanges between the agent and client from other exchanges between other agents and other clients (Eilbacher, col. 10, ll. 36-44), and from other exchanges between the agent and the client (using a time stamp for an exchange between agent and client, col. 10, l. 37), further comprising correlating an identifier of the agent and client with the transaction file (i.e., customer and agent identification, col. 10, ll. 36-37). Since every transaction is marked by a time stamp, agent name, customer name, etc., each exchange is segregated from other exchanges between agents and other clients, as well as the agent and the client, because the other transactions are marked with different time stamps, agent names, and customer names.

As to claim 10, Eilbacher, Armstrong, and Ulrich do not expressly teach wherein correlating an identifier of the agent and client with the transaction file further comprises matching e-mail addresses of the agent and client to e-mail addresses within the transaction file.

However, Ulrich teaches wherein correlating an identifier of the agent and client with the transaction file further comprises matching e-mail addresses of the agent and client to e-mail addresses within the transaction file (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that the above claimed subject matter is implemented. The motivation would have been to facilitate organization of data, as known to one of ordinary skill in the art.

As to claim 19, Eilbacher, Armstrong, and Ulrich do not expressly teach wherein word content of each exchange is used to determine whether different transactions are part of one or different transactions.

However, Ulrich teaches wherein word content of each exchange is used to determine whether different transmissions are part of one transaction or different transactions (see fig. 3, col. 7, ll. 45-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that word content is used as claimed. The motivation would have been to facilitate organization of data, as known to one of ordinary skill in the art.

As to claim 24, Eilbacher, Armstrong, and Ulrich do not expressly teach correlating a subject matter identifier field of the exchanges with a subject matter identifier of the transaction file.

However, Ulrich teaches correlating a subject matter identifier field of the exchanges with a subject matter identifier of the transaction file (see fig. 3).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that the above correlation is accomplished. The motivation would have been to facilitate organizing data, as known to one of ordinary skill in the art.

As to claim 26, Eilbacher as applied above further teaches “selection processor...initial contact” as seen in claim 2 above, and determining a type for each transaction, and attaching a time stamp to each transmission within a transaction (col. 10, ll. 27-45).

As to claim 29, Eilbacher, Armstrong, and Ulrich teach an effort value, as discussed above, but do not expressly teach using proportionality to calculate an equivalent time of effort.

However, Ulrich teaches wherein an effort value is determined using proportionality to calculate an equivalent time of effort (e.g., col. 7, l. 35 – col. 8, l. 67, col. 10, l. 13 – l. 49). This equivalent time of effort is an equivalent time from the reader’s perspective.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that an equivalent time of effort is additionally calculated. The motivation would have been to provide a heuristic measure of who and what is consuming time and whether those demands on time are line with organizational priorities, as taught by Ulrich (col. 10, ll. 46-50).

Claims 13-17, 20-23, 25, 27, and 28 are rejected based on the same reasoning as the above claims.

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilbacher, Armstrong, and Ulrich, and further in view of McCalmont et al (U.S. Patent 5,621,789), hereafter “McCalmont.”

As to claim 11, Eilbacher, Armstrong, and Ulrich teach or suggest completed transactions, as discussed above, and further teach or suggest determining and displaying a total effort value between the agent and client, but do not expressly teach determining in real time an ongoing transaction total effort value for ongoing transactions.

However, McCalmont displays a total effort between agent and client in real time (fig. 5b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that real time statistics on total ongoing transaction effort between the agent and client are displayed. The motivation would have been to indicate to the user the efficiency of his work, as taught by McCalmont (col. 6, ll. 62-64).

As to claim 12, Ulrich as applied above further teaches or suggests correlating a subject matter identifier field of the exchanges with a subject matter identifier of the transaction file (see fig. 3).

6. Claims 18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilbacher, Armstrong, and Ulrich, and further in view of Ichbiah (U.S. Patent 5,623,406).

As to claims 18 and 30, Eilbacher, Armstrong, and Ulrich as applied above teach an effort value, as discussed above, but do not expressly teach wherein the effort value is determined based upon how long a transmission would have required had it been spoken, or based on the character length of the transmission.

However, telephone responses can be spoken, and e-mail responses can be typed. Ichbiah states that normal speech is about 100 words per minute, and a skilled typist can be expected to type at 40-70 words per minute (col. 1, ll. 20-25). Typing at a certain number of words per minute is based on character length, since typed words have characters.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that the email response time (effort value) is based on how long the email would have taken if it were spoken, or based on how long the email would have taken if it was typed by a skilled typist [e.g., 70 words (characters) per minute]. The motivation would have to apply a performance standard for email agents, as known to one of ordinary skill in the art. For example, a call center might want to assume that typing an email deserves the same amount of response time as speaking. Other call centers might want to account for the fact that typing is slower than speaking.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Lu whose telephone number is (571) 272-8594. The examiner can normally be reached on 8:30 - 5:00; M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached at (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Charles E Lu/

Examiner, Art Unit 2161

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